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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,148	03/02/2004	Duane William Zugel	82505YY	3026

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Harold L. Novick
NATH & ASSOCIATES PLLC
6th Floor
1030 15th Street, N.W.
Washington, DC 20005

EXAMINER

SMITH, RICHARD A

ART UNIT PAPER NUMBER

2859

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,148

Applicant(s)

ZUGEL ET AL.

Examiner

R. Alexander Smith

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 20, 21, 23, 25, 26, 28-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,487,222 to Fairchild in view of U.S. 4,103,430 to Schrader.

Fairchild discloses a spirit level as shown in figures 9-12 comprising: most of the limitations of claim 20 with the exception of the optical transfer element transferring an image to a viewing plane generally parallel to the level face, most of the limitations of claim 29 with the exception of the optical transfer element transfers an image along a line of sight substantially

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parallel to the longitudinal axis of the second bubble level, and the limitations of claims 21, 23, 25, 26, 28, 30 and 32.

Fairchild does not teach the optical transfer element transferring an image to a viewing plane generally parallel to the level face and along a line of sight substantially parallel to the longitudinal axis of the second bubble level.

Schrader discloses a spirit level employing a optical transfer image fixed to the body and extending beyond the body wherein mounting arrangement (figure 4, column 3 lines 17-35) allows for 360 degree rotation in order to allow the level to be accurately read at off axis reading angles and from a number of different viewing positions (column 1, lines 35-63 and 20-24) such as in a confined space. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the optical transfer element, taught by Fairchild, to accommodate a 360 degree rotation, as taught by Schrader, in order to increase the versatility of the optical transfer image to read at other angles accurately throughout the 360 degree range.

With respect to the optical transfer element transferring an image to a viewing plane generally parallel to the level face and along a line of sight substantially parallel to the longitudinal axis of the second bubble level, as claimed by Applicant: As stated above, Schrader discloses a 360 degree rotation such that the mirror can be position to read at other angles accurately. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to oriented the optical transfer element, taught by Fairchild as modified by Schrader, at a viewing plane generally parallel to the level face and along a line of sight substantially parallel to the longitudinal axis of the second bubble level at bubble since this is

one of the angles included in a 360 degree rotation and in order to allow the user to accurately read plumb in a confined space.

3. Claims 20, 22-26 and 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 4,103,430 to Schrader in view of U.S. 3,064,535 to Anderson

Schrader discloses a spirit level comprising at least a second bubble vial with the limitations as claimed, the body being of metal alloy (column 25-26), an optical transfer element (10) fixed to the body and extending beyond the body, the optical transfer element being a mirror (56), the mirror being detachable, the mirror being hingedly attached to the body. Schrader discloses the optical transfer image fixed to the body and extending beyond the body wherein the mounting arrangement (figure 4, column 3 lines 17-35) allows for 360 degree rotation in order to allow the level to be accurately read at off axis reading angles and from a number of different viewing positions (column 1, lines 35-63 and 20-24) such as in a confined space.

Schrader does not teach a first elongate bubble vial and a first bubble level with the limitations as claimed, and the optical transfer element transferring an image to a viewing plane generally parallel to the level face and along a line of sight substantially parallel to the longitudinal axis of the second bubble level.

Anderson discloses a spirit level having a first elongate bubble vial and a first bubble level with at least one second bubble vial. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the first bubble vial and bubble level,

taught by Anderson, to the spirit level, shown by Schrader, in order to allow the user to measure horizontal in addition to plumb.

With respect to the optical transfer element transferring an image to a viewing plane generally parallel to the level face and along a line of sight substantially parallel to the longitudinal axis of the second bubble level, as claimed by Applicant: As stated above, Schrader discloses a 360 degree rotation such that the mirror can be position to read at other angles accurately. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to oriented the optical transfer element, taught by Schrader, at a viewing plane generally parallel to the level face and along a line of sight substantially parallel to the longitudinal axis of the second bubble level at bubble since this is one of the angles included in a 360 degree rotation and in order to allow the user to accurately read plumb in a confined space.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schrader and Anderson, as applied to claims 20, 22-26 and 28-37 above, and further in view of U.S. 3,167,864 to Lange.

Schrader and Anderson together teach all that is claimed as discussed in the above rejections of claims 20, 22-26 and 28-37 except for the optical transfer device being a prism.

Lange discloses a spirit level wherein a prism is preferred over a mirror since silver coatings tend to deteriorate (column 2, lines 9-14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the optical transfer device, taught by Schrader, by using a prism in place of a mirror, as suggested by Lange, in order to prevent deterioration of the mirror from affecting the transferred image.

Response to Remarks

5. Applicant's remarks filed September 9, 2005 with respect to allowed claims 20-37 are noted. In the Office action mailed June 9, 2005 the examiner stated:

8. Applicant's arguments filed March 30, 2005 with respect to claim 20-37 has been fully considered.

Applicant refers to an affidavit or declaration filed in the parent application. Affidavits or declarations, such as those submitted under 37 CFR 1.131 and 37 CFR 1.132, filed during the prosecution of the parent application do not automatically become a part of this application. Where it is desired to rely on an earlier filed affidavit or declaration, the applicant should make the remarks of record in the later application and include a copy of the original affidavit or declaration filed in the parent application.

In this case, a copy of the original affidavit or declaration needs to be filed.

The argument with respect to the secondary considerations, i.e., the response with arguments, exhibits, and the declaration filed under Rule 1.132, is persuasive and a statement regarding the secondary considerations will be included in the reasons for allowance.

Since a copy of the original affidavit or declaration has not been filed then the Examiner is taking this as meaning that the secondary considerations are not to be considered.

Applicant should be note that since Schrader shows an attachable optical transfer device that accommodates standard levels and allows 360 degree rotation to which the examiner was originally unaware, that this may affect allowability should a copy of the original affidavit or declaration be submitted and the secondary considerations are given weight.

6. Applicant's remarks filed September 9, 2005 with respect to claim 1 being cancelled are noted and the nonstatutory double patenting rejection is withdrawn.

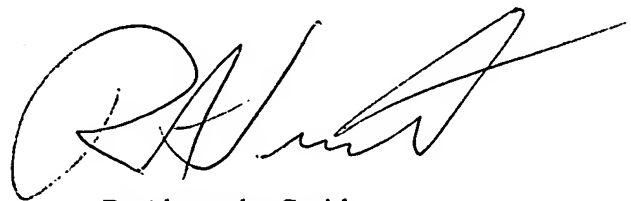
Conclusion

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related elements and spirit levels.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'R. Alexander Smith', with a long, sweeping horizontal line extending to the right.

R. Alexander Smith
Primary Examiner
Technology Center 2800

RAS
November 21, 2005